

PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

REC'D 06 APR 2004

WIPO

PCT

Applicant's or agent's file reference 489031DIS	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).	
International Application No. PCT/NZ2003/000204	International Filing Date (day/month/year) 11 September 2003	Priority Date (day/month/year) 11 September 2002
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ B29C 53/02, 53/56, B29B 15/15 //B29L 22:00		
Applicant FISHER & PAYKEL HEALTHCARE LIMITED et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 4 sheet(s).
3. This report contains indications relating to the following items:
- I ☒ Basis of the report
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 16 December 2003	Date of completion of the report 24 March 2004
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer A. DAVIES Telephone No. (02) 6283 2072

I. Basis of the report**1. With regard to the elements of the international application:***

- ☐ the international application as originally filed.
- ☒ the description, pages 1,2,4,6-18 as originally filed,
pages , filed with the demand,
pages 3,5 received on 16 March 2004 with the letter of 16 March 2004
- ☒ the claims, pages 19,21,22,24 as originally filed,
pages , as amended (together with any statement) under Article 19,
pages , filed with the demand,
pages 20,23 received on 16 March 2004 with the letter of 16 March 2004
- ☒ the drawings, pages 1-10 as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the sequence listing part of the description:
pages , as originally filed
pages , filed with the demand
pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims 1-29	YES
	Claims	NO
Inventive step (IS)	Claims 1-29	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-29	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

US, 4897030, A (Vajtay) 30 January 1990

US, 5607529, A (Adamczyk et al) 4 March 1997

US, 5454061, A (Carlson) 26 September 1995

None of the citations alone or in combination render the invention defined by the claims not novel or uninventive.

a heating means for heating said thin polymer ribbon,

a creasing means for forming a crease in said ribbon after being heated by said heating means, approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

5

21. An apparatus for forming a film as claimed in any one of claims 17 to 19, wherein said apparatus further comprises:

a creasing means for forming a crease in said ribbon approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

10

22. An apparatus for continuously forming conduit comprising:

a means for supplying a thin polymer ribbon,

at least one spool for supplying at least one thin conductor, at a first position adjacent to and substantially parallel with said ribbon,

15

a folding means to fold said ribbon substantially in half such that said at least one conductor is adjacent to and encapsulated by said folded ribbon,

a thermal welding means adapted to weld said folded film and permanently encapsulate said at least one conductor,

a means for delivering said folded ribbon having "leading" and trailing" lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the former and the trailing edge of each turn underlapping the leading edge of a succeeding turn, and

20

a means for applying a bead of molten plastic material to said lapping edges of adjacent turns of ribbon, such that said bead welds said adjacent edges.

25

23. An apparatus for continuously forming conduit as claimed in claim 22, wherein said apparatus further includes, a creasing means for forming a crease in said folded ribbon approximately midway across said ribbon,

30

said crease being substantially parallel with said ribbon, and

said creasing means positioned to crease said ribbon before being delivered around said former.

REPLACED BY
ART 34 AMPT

6. A method of forming a film as claimed in claim 5, wherein said crease is formed by passing said folded film through at least one set of crease rollers, said rollers in a creasing region shaped according to the profile of said crease.

5 7. A method of forming a film comprising:
providing a thin polymer ribbon,
heating said ribbon to soften said ribbon,
forming a crease approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

10

8. A method of forming a film as claimed in claim 7, wherein said crease is formed by passing said folded film through at least one set of crease rollers, said crease rollers in a creasing region shaped according to the profile of said crease.

15

9. A method of continuously forming a conduit comprising:
providing a thin polymer ribbon,
positioning at least one conductor adjacent to and substantially parallel with said ribbon,

20

folding said ribbon substantially in half parallel with said ribbon such that said at least one conductor is adjacent to, and encapsulated in said fold, and

thermally welding said folded ribbon to permanently encapsulate said at least one conductor,

supplying said folded ribbon having "leading" and trailing" lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the former and the trailing edge of each turn underlapping the leading edge of a succeeding turn, and

25 applying a bead of molten plastic material to said lapping edges of adjacent turns of ribbon, such that said bead welds said adjacent edges.

30

REPLACED BY
ART 34 ANDT

at least one spool for supplying at least one thin conductor, at a first position adjacent to and substantially parallel with said ribbon,

a folding means to fold said ribbon substantially in half such that said at least one conductor is adjacent to and encapsulated by said folded ribbon,

5 a thermal welding means adapted to weld said folded film and permanently encapsulate said at least one conductor.

Preferably said thermal welding means includes a pair of heated rollers, said rollers applying pressure to squeeze said folded ribbon together.

10 Preferably at least one of said rollers includes a groove for at least partially receiving each of said at least one conductor and the layer of ribbon over it.

In a further aspect the invention may broadly be said to consist in an apparatus for forming a film comprising:

a means for supplying a thin polymer ribbon,

a heating means for heating said thin polymer ribbon,

15 a creasing means for forming a crease in said ribbon after being heated by said heating means, approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

Preferably said apparatus further comprises:

20 a creasing means for forming a crease in said ribbon approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

-- In a further aspect the invention may broadly be said to consist in an apparatus for continuously forming conduit comprising:

a means for supplying a thin polymer ribbon,

25 at least one spool for supplying at least one thin conductor, at a first position adjacent to and substantially parallel with said ribbon,

a folding means to fold said ribbon substantially in half such that said at least one conductor is adjacent to and encapsulated by said folded ribbon,

a thermal welding means adapted to weld said folded film and permanently encapsulate said at least one conductor,

30 a means for delivering said folded ribbon having "leading" and trailing" lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon

REPLACED BY
ART 34 AMDT

providing a thin polymer ribbon,
heating said ribbon to soften said ribbon,
forming a crease approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

5 Preferably said crease is formed by passing said folded film through at least one set of crease rollers,

said crease rollers in a creasing region shaped according to the profile of said crease.

In a further aspect the invention may broadly be said to consist in a method of
10 continuously forming a conduit comprising:

providing a thin polymer ribbon,

positioning at least one conductor adjacent to and substantially parallel with said ribbon,

folding said ribbon substantially in half parallel with said ribbon such that said
15 at least one conductor is adjacent to, and encapsulated in said fold, and

thermally welding said folded ribbon to permanently encapsulate said at least one conductor,

supplying said folded ribbon having "leading" and trailing" lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of
20 each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the former and the trailing edge of each turn underlapping the leading edge of a succeeding turn, and

applying a bead of molten plastic material to said lapping edges of adjacent turns of ribbon, such that said bead welds said adjacent edges.

25 Preferably said at least one conductor is a pair of conductors, and said conductors are positioned parallel and closely spaced and said ribbon is folded adjacent one said conductor; such that a first of said pair of conductors is adjacent to and encapsulated in said fold, and

a second of said pair of conductors is spaced from said first conductor and
30 encapsulated in said fold.

Preferably said thermal welding includes passing said folded ribbon between a pair of heated rollers,

REPLACED BY
ART 34 AMDT

16 March 2004

- 3 -

providing a thin polymer ribbon,
heating said ribbon to soften said ribbon,
forming a crease approximately midway across said ribbon, said crease being
substantially parallel with said ribbon, and
5 winding said creased ribbon onto a spool

Preferably said crease is formed by passing said film through at least one set of
crease rollers,

said crease rollers in a creasing region shaped according to the profile of said
crease.

10 In a further aspect the invention may broadly be said to consist in a method of
continuously forming a conduit comprising:

providing a thin polymer ribbon,

positioning at least one conductor adjacent to and substantially parallel with
said ribbon,

15 folding said ribbon substantially in half parallel with said ribbon such that said
at least one conductor is adjacent to, and encapsulated in said fold, and

thermally welding said folded ribbon to permanently encapsulate said at least
one conductor,

supplying said folded ribbon having "leading" and "trailing" lateral edges,
20 spirally around a former rotating and advancing said conduit, with the leading edge of
each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the
former and the trailing edge of each turn underlapping the leading edge of a
succeeding turn, and

applying a bead of molten plastic material to said lapping edges of adjacent
25 turns of ribbon, such that said bead welds said adjacent edges.

Preferably said at least one conductor is a pair of conductors, and said
conductors are positioned parallel and closely spaced and said ribbon is folded
adjacent one said conductor, such that a first of said pair of conductors is adjacent to
and encapsulated in said fold, and

30 a second of said pair of conductors is spaced from said first conductor and
encapsulated in said fold.

Preferably said thermal welding includes passing said folded ribbon between a
pair of heated rollers,

16 March 2004

- 5 -

at least one spool for supplying at least one thin conductor, at a first position adjacent to and substantially parallel with said ribbon,

a folding means to fold said ribbon substantially in half such that said at least one conductor is adjacent to and encapsulated by said folded ribbon,

5 a thermal welding means adapted to weld said folded film and permanently encapsulate said at least one conductor.

Preferably said thermal welding means includes a pair of heated rollers, said rollers applying pressure to squeeze said folded ribbon together.

10 Preferably at least one of said rollers includes a groove for at least partially receiving each of said at least one conductor and the layer of ribbon over it.

In a further aspect the invention may broadly be said to consist in an apparatus for forming a film comprising:

a means for supplying a thin polymer ribbon,

a heating means for heating said thin polymer ribbon,

15 a creasing means for forming a crease in said ribbon after being heated by said heating means, approximately midway across said ribbon, said crease being substantially parallel with said ribbon, and

a spool for receiving said creased ribbon.

Preferably said apparatus further comprises:

20 a creasing means for forming a crease in said ribbon approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

In a further aspect the invention may broadly be said to consist in an apparatus for continuously forming conduit comprising:

a means for supplying a thin polymer ribbon,

25 at least one spool for supplying at least one thin conductor, at a first position adjacent to and substantially parallel with said ribbon,

a folding means to fold said ribbon substantially in half such that said at least one conductor is adjacent to and encapsulated by said folded ribbon,

30 a thermal welding means adapted to weld said folded film and permanently encapsulate said at least one conductor.

a means for delivering said folded ribbon having "leading" and "trailing" lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon

- 20 -

6. A method of forming a film as claimed in claim 5, wherein said crease is formed by passing said folded film through at least one set of crease rollers, said rollers in a creasing region shaped according to the profile of said crease.
- 5 7. A method of forming a film comprising:
providing a thin polymer ribbon,
heating said ribbon to soften said ribbon,
forming a crease approximately midway across said ribbon, said crease being substantially parallel with said ribbon, and
10 winding said creased ribbon onto a spool.
8. A method of forming a film as claimed in claim 7, wherein said crease is formed by passing said film through at least one set of crease rollers, said crease rollers in a creasing region shaped according to the profile of said
15 crease.
9. A method of continuously forming a conduit comprising:
providing a thin polymer ribbon,
positioning at least one conductor adjacent to and substantially parallel with
20 said ribbon,
folding said ribbon substantially in half parallel with said ribbon such that said at least one conductor is adjacent to, and encapsulated in said fold, and
thermally welding said folded ribbon to permanently encapsulate said at least one conductor,
25 supplying said folded ribbon having "leading" and "trailing" lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the former and the trailing edge of each turn underlapping the leading edge of a succeeding turn, and
30 applying a bead of molten plastic material to said lapping edges of adjacent turns of ribbon, such that said bead welds said adjacent edges.

- 23 -

a heating means for heating said thin polymer ribbon,

a creasing means for forming a crease in said ribbon after being heated by said heating means, approximately midway across said ribbon, said crease being substantially parallel with said ribbon, and

5 a spool for receiving said creased ribbon.

21. An apparatus for forming a film as claimed in any one of claims 17 to 19, wherein said apparatus further comprises:

10 a creasing means for forming a crease in said ribbon approximately midway across said ribbon, said crease being substantially parallel with said ribbon.

22. An apparatus for continuously forming conduit comprising:

15 a means for supplying a thin polymer ribbon,
at least one spool for supplying at least one thin conductor, at a first position adjacent to and substantially parallel with said ribbon.

a folding means to fold said ribbon substantially in half such that said at least one conductor is adjacent to and encapsulated by said folded ribbon.

a thermal welding means adapted to weld said folded film and permanently encapsulate said at least one conductor.

20 a means for delivering said folded ribbon having "leading" and trailing" lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the former and the trailing edge of each turn underlapping the leading edge of a succeeding turn, and

25 a means for applying a bead of molten plastic material to said lapping edges of adjacent turns of ribbon, such that said bead welds said adjacent edges.

23. An apparatus for continuously forming conduit as claimed in claim 22, wherein said apparatus further includes, a creasing means for forming a crease in said folded
30 ribbon approximately midway across said ribbon,

said crease being substantially parallel with said ribbon, and

said creasing means positioned to crease said ribbon before being delivered around said former.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NZ03/00204

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. ⁷ : B29C 053/02, 053/56, B29B 015/14// B29L 022:00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) IPC: B29C 053/IC + KEYWORDS		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Derwent: ribbon or tape or strip and crease or fold or bend		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US, 4897030, A (Vajtay) 30 January 1990	7,20
A	US, 5607529, A (Adamczyk et al) 4 March 1997	1-29
A	US, 5454061, A (Carlson) 26 September 1995	1-29
<input type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>		
Date of the actual completion of the international search 24 October 2003		Date of mailing of the international search report 30 OCT 2003
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929		Authorized officer A. DAVIES Telephone No : (02) 6283 2072

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/NZ03/00204

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	4897030	US	4780261		
US	5607529				
US	5454061	AU	24305/95	EP	0760925
		US	5637168	NZ	285260
		WO	9533163	US	5848223
				US	6190480
END OF ANNEX					

PATENT COOPERATION TREATY

From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

07 APR 2004
RECEIVED

To:

A J Park & Son
PO Box 949
Wellington 6001
NEW ZEALAND

PCT
NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY EXAMINATION
REPORT

(PCT Rule 71.1)

Date of mailing
day/month/year

29 MAR 2004

Applicant's or agent's file reference
489031DIS

IMPORTANT NOTIFICATION

International Application No.

PCT/NZ2003/000204

International Filing Date

11 September 2003

Priority Date

11 September 2002

Applicant

FISHER & PAYKEL HEALTHCARE LIMITED et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translations to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide

Name and mailing address of the IPEA/AU

AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaaustralia.gov.au
Facsimile No. (02) 6285 3929

Authorized officer

A. DAVIES

Telephone No. (02) 6283 2072

PATENT COOPERATION TREATY

From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

RECEIVED

02 FEB 2004

AJ PARK

To:

A J Park & Son
PO Box 949
Wellington 6001
NEW ZEALAND

PCT

WRITTEN OPINION
(PCT Rule 66)

Date of mailing
(day/month/year) 23 JAN 2004

Applicant's or agent's file reference
489031DIS

REPLY DUE within TWO MONTHS
from the above date of mailing

International Application No.
PCT/NZ2003/000204

International Filing Date (day/month/year)
11 September 2003

Priority Date (day/month/year)
11 September 2002

International Patent Classification (IPC) or both national classification and IPC
Int. Cl. 7 B29C 53/02, 53/56, B29B 15/15 //B29L 22:00

Applicant

FISHER & PAYKEL HEALTHCARE LIMITED et al

1. This written opinion is the **first** drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☒ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The **FINAL DATE** by which the international preliminary examination report must be established according to Rule 69.2 is:
11 January 2005
4. The applicant is hereby invited to reply to this opinion.

When? See the **Reply Due** date indicated above. However, the Australian Patent Office will not establish the Report before the earlier of (i) a response being filed, or (ii) one month before the **Final Date** by which the international preliminary examination report must be established. The Report will take into account any response (including amendments) filed before the Report is established. If no response is filed by 1 month before the **Final Date**, the international preliminary examination report will be established on the basis of this opinion.

Applicants wishing to have the benefit of a further opinion (if needed) before the report is established should ensure that a response is filed at least 3 months before the **Final Date** by which the international preliminary examination report must be established.

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.
For an informal communication with the examiner, see Rule 66.6.

Name and mailing address of the IPEA/AU
AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaaustralia.gov.au
Facsimile No. (02) 6285 3929

Authorized Officer

A. DAVIES
Telephone No. (02) 6283 2072

WRITTEN OPINION

International application No.
PCT/NZ2003/000204

I. Basis of the opinion

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed.
- ☐ the description, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the claims, pages , as originally filed,
pages , as amended under Article 19,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the drawings, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the sequence listing part of the description:
pages , as originally filed
pages , filed with the demand
pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"

WRITTEN OPINION

International application No.
PCT/NZ2003/000204

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-6,8-19,21-29	YES
	Claims 7,20	NO
Inventive step (IS)	Claims 1-6,8-19,21-29	YES
	Claims 7,20	NO
Industrial applicability (IA)	Claims 1-29	YES
	Claims	NO

2. Citations and explanations

US 4897030

This citation is directed toward an apparatus for the lengthwise folding of thermoplastic strip material and provides for the provision and heating of a thin polymer ribbon and the formation of a crease or creases along the ribbon. As such this renders the invention defined by claims 7 and 20 not novel and uninventive.

WRITTEN OPINION

International application No.
PCT/NZ2003/000204

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims 27-29 do not comply with the requirements of PCT Rule 6.2(a) in that they make reference to the drawings.